### EXPLANATION OF THE PLATES.

#### PLATE 7.

Geum (Sieversia) sikkimense Prain.

1, A plant  $\times \frac{1}{2}$ ; 2 and 3, radical leaves, nat. size; 4, flower, dissected, nat. size; 5, fruiting head, nat. size; 6, stamens  $\times 4$ ; 7 carpel  $\times 4$ ; 8 and 9, ovules  $\times 4$ ; 10, ripe achene  $\times 4$ ; 11 and 12, seeds  $\times 4$ .

### PLATE 8.

Potentilla sikkimensis Prain.

1, A plant, nat. size; 2, flower  $\times 8$ ; 3, flower, dissected  $\times 8$ ; 4, stamens  $\times 8$ ; 5, fruiting head, nat. size; 6, carpels, nuch enlarged; 7, ripe achene  $\times 4$ ; 8, the same, laid open  $\times 4$ ; 9, seed  $\times 4$ .

Additions to the Collection of Oriental Snakes in the Indian Museum.

—By Nelson Annandale, B.A., Deputy Superintendent of the Indian Museum. (With Plate IX)

In 1891 my predecessor Mr. W. L. Sclater published his List of the Snakes in the Indian Museum. Since that date a large number of specimens have accumulated, the more important coming from the North-West Frontier, Assam, Siam and Java. Among them are examples of species of intrinsic or geographical interest or new to our collection. I propose to offer to the Society a series of short papers on these specimens. For the sake of convenience, and in order not to interrupt other work in progress, I will deal with the accumulation in sections of moderate bulk. This will make it possible to put on record new specimens as they reach the Museum, and will enable such records to be published within a reasonable time. The names of species new to the collection since 1890 are distinguished by an asterisk. The identifications, except as regards the Afghan-Baluch species, are chiefly my own, and I have made a careful re-examination of such specimens as other officials of the Museum had determined.

#### Part I.

#### TYPHLOPIDÆ.

## 1. TYPHLOPS DIARDII Schleg.

One specimen, presented by H. W. Biggie, Esq., from Pitsanuloke, N. Siam.

This species, known from Burma, Assam and Cochin China, does not appear to have been recorded from Siam.

### 2. Typhlops acutus (D. & B.)

T. acutus, W. L. Sclater, J.A.S.B. LX, p. 232; and List Snakes, p. 3.

One of the Museum attendants lately brought to the Superintendent a living specimen of this species from Calcutta. It was formerly regarded as quite a typical S. Indian form. Possibly the specimen may have been introduced into Calcutta with the earth round the roots of plants; but this does not seem probable. Sclater records the species from other parts of Bengal as well as Calcutta.

### UROPELTIDÆ.

(3) Silybura myhendræ Bedd.\* (4). S. madurensis\* Bedd, and (5) Melanophidium punctatum\* Bedd., all from S. India, have been added to the collection.

#### COLUBRIDÆ.

- 6. Xylophis stenorhynchus\* (Gthr.)
  - 7. TRACHISCHIUM FUSCUM (Blyth)

Several specimens have been found in a large collection of Assamese snakes sent by the Government of Assam to the Museum in 1891.

## 8. Lycodon striatus (Shaw)

One specimen, obtained by Col. McMahon on the Perso-Baluch frontier.

9. Contia angusticeps.\* Blgr. (Plate IX, fig. 1.)

Five specimens from Malakand, from Col. McMahon.

This species was described by Boulenger (Cat. Snakes ii, p. 262) after the publication of his volume in the "Fauna of India" series. The type, which was from Baluchistan, appears to have been lost. I think that the author of the species has examined at any rate some of the specimens collected in Malakand.

10. LYTORHYNCHUS RIDGEWAYI\* Blgr.

L. ridgewayi, Alc. and Finn, J.A.S.B. LXV (2). 1896, p. 562.

11. LYTORHYNCHUS MAYNARDI\* Alc. and Finn.

L. maynardi, Alc and Finn, loc. cit.

12. ZAMENIS DIADEMA (Schleg.)

Two specimens, sent by Col. McMahon from the Perso-Baluch

frontier. The larger is light in colour, with few markings; the smaller is well-marked. Neither belongs to the form atriceps.

### 13. ZAMENIS RHODORACHIS\* Jan

Z. rhodorachis, Alc. and Finn, op. cit. p. 563.

In addition the specimens mentioned by these authors the Museum has lately received from Col. McMahon two specimens from the Perso-Baluch frontier.

14. ZAMENIS KARELINII (Brandt)

Z. karelinii, Alc. and Finn, loc. cit.

Six specimens from Col. McMahon, from the same district as the last.

15. Stoliczkaia khasiensis\* Jerd. (Plate IX, fig. 2. S. khasiensis, Blyr. Faun. Ind. Rept., p. 354, fig. 103; Cat. Snakes, i p. 75.

In the collection of Assamese snakes to which reference has been made, I have been so fortunate as to find an example of this extremely rare species. It appears to be the second specimen known. The type, from the Khasi Hills, is in the British Museum. In the Indian Museum specimen the frontal shield is completely divided by a longitudinal suture. There are four small chin shields on each side, each in contact with the opposite shield mesially, the hindermost pair in contact with the first ventral behind. Ventrals—210: sub-caudals—116: anal entire: 28 rows body scales, the three lowest on each side pale with dark bases. Total length—809 mm: length of tail—235 mm.

The only other known species of this genus occurs in Borneol .--

16. DIPSADOMORPHUS TRIGONATUS (Schneid.) (Plate IX, figs., 3, 4.) Dipsas trigonata, Blgr. Faun. Ind. Rept., p. 358. W. L. Sclater, List, Snakes, p. 45. Dipsadomorphus trigonatus, Blgr. Cat. Snakes, iii, p. 63.

Three specimens sent by Col. McMahon from the Perso-Baluch frontier.

They agree in having the dorsal surface of head of an almost uniform sooty-black, which is most intense in the youngest specimen. The markings on the back also appear to be brighter than those of most examples from Peninsular India. A specimen from Assam agrees with them in this respect, but differs in having the head marked in the typical manner.

Should it be considered right to give the black-headed form a name, it may be known as var. melanocephalus.

The Perso-Baluch specimens exhibit—apart from their black heads—the close superficial resemblance to Echis carinatus noted by Boulenger

<sup>1</sup> Stoliczkaia borneensis, Blgr. Ann. Mag. N. H. (7) iv, 1899, p. 452.

and others. Of this venomous species no less than 15 specimens occur in Col. McMahon's small collection from the Perso-Baluch frontier.

### 17. DIPSADOMORPHUS MULTIMACULATUS (Boie)

Dipsas multimaculata, Blgr. Faun. Ind. Rept. p. 360. W. L. Sclater, List Snakes, p. 46. Dipsadomorphus multimaculatus, Blgr. Cat. Snakes, iii, pp. 63, 64.

A specimen from Pitsanuloke, N. Siam, has been presented by H. W. Biggie, Esq.

18. DIPSADOMORPHUS DIGHTONII\* (Blgr.)

Dipsas dightoni, Blgr. J. Bomb. N. H. Soc. viii, 1894, p. 528, pl. Dipsadomorphus dightonii, id., Cat. Snakes iii, p. 69.

A specimen from Peermerd, Travancore, has been obtained by exchange with the Trevandrum Museum.

### 19. DIPSADOMORPHUS DENDROPHILUS\* (Boie)

D. dendrophilus, Blgr. Cat. Snakes iii, pp. 70, 71.

Several specimens from the Royal Natural History Society of Batavia.

The majority of the specimens belong to var. E. of Boulenger's Catalogue; the remainder to var. B. All are probably from the Malay Archipelago, but no exact locality can be assigned them.

# 20. TAPHROMETOPUM LINEOLATUM (Brandt)

T. lineolatum, Alc. and Finn., op. cit. p. 563.

In addition to the specimens recorded by these authors, Col. McMahon has recently sent down seven from the Perso-Baluch frontier.

### 21. DRYOPHIS XANTHOZONA\* Boie.

A specimen from the Royal Natural History Society of Batavia. Not an Indian species.

# 22. Chrysopelea ornata (Shaw)

C. ornata, S. Flower, P.Z.S. 1899, p. 682.

A specimen of Boulenger's var. D from Pitsanuloke, N. Siam; presented by H. W. Biggie, Esq. This is the common variety in Assam, Burma, the Siamese Malay States and Siam proper.

# 23. Bungarus bungaroides (Cant.)

Two young specimens, measuring from 310-340 mm., from N. Cachar.

Coloration.—Dorsal surface intense black: ventral surface darkgrey with a pearly lustre. Chin and throat yellow: a yellow bar across the top of the head slightly behind the nostrils: head-shields sparingly dashed with yellow: an incomplete yellow collar on the nape. On the tail and body about sixty yellow rings, narrow and more or less V-shaped above, expanding below, sometimes joined together longitudinally by irregular blotches of the same colour on the belly.

### VIPERIDÆ.

### 24. Eristocophis macmahonii\* Alc. and Finn

E. Macmahonii, Alc and Finn, op. cit. p. 564.

## 25. Pseudocerastes persicus\* (Pall.?)

P. persicus, Blgr. Cat. Snakes iii, p. 501.

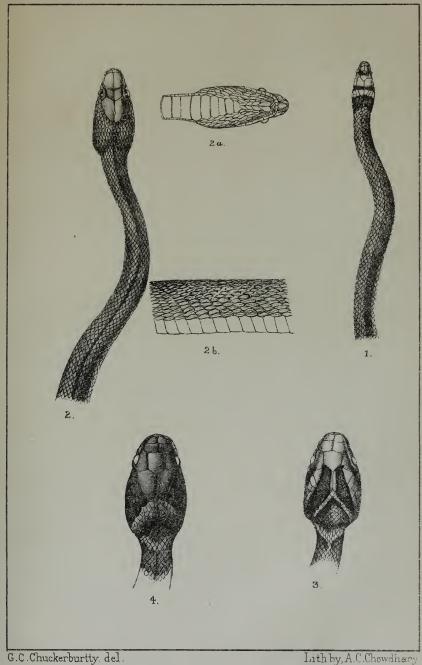
A specimen, collected and presented by Lieut. F. C. Webb-Ware, from Koh Malik, Sujah, Baluchistan. I am not aware that this snake has hitherto been recorded from British India. Boulenger gives the distribution as Persia.

### 26. Ancistrodon rhodostoma\* (Boie)

A. rhodostoma, Blgr. Cat. Snakes iii, p. 527; Fascic. Malay. Zool. i, pp. 170, 171, 176.

Several specimens from the Royal Natural History Society of Batavia.

This snake has recently been recorded by Boulenger from the Siamese Malay States and from the island of Salangka, Salang or Junk Ceylon. Probably it will be reported from Tenasserim also, as it is said to occur in Siam. The Malays of Patani, where Mr. H. C. Robinson and I have collected it, deny that its bite is deadly. A servant of mine was bitten in the foot by a snake which he stated to belong to this species near the Siamese border in Upper Perak. The effect was very little more serious than that of a hornet's sting. Boulenger, however, talks of "this large and deadly Crotaline snake," and probably the venom is more powerful in specimens from Java, where the snake would appear to be far more common than it is in most parts of the Malay Peninsula. All poisonous snakes except the Hydrophinæ are, however, scarce in both the Federated and the Siamese Malay States. In the latter, where I have spent, in the aggregate, more than a year collecting reptiles and other animals, I have only twice come across a cobra.



G.C.Chuckerburtty.del.
1.CONTIA ANGUSTICEPS.
2.STOLIZKAIA KHASIENSIS.

3. DIPS ADOMORPHUS TRIGONATUS.
4. "ver.melanoçephalus.